Ground-Water Protection

(1) General Ground-Water Monitoring Requirements

All permitted land disposal facilities (6 facilities) are required to develop a ground-water sampling and analysis procedure and an appropriate statistical method. Land disposal facilities that have lost interim status and are submitting an application for post-closure (100 facilities) must summarize the interim status ground-water monitoring data required under §270.14(c)(1). EPA estimates that ten percent of these facilities (10 facilities) will submit information on plume contamination as required in §270.14(c)(4).

Associated O&M costs include:

- Contractor services to prepare summary of ground-water monitoring data obtained during the interim status period;
- Contractor services in preparing information obtained from hydrogeologic investigations of the facility area;
- Fees associated with adding information to topographical map;
- Contractor services for assistance in providing description of plume contamination, delineating the extent of the plume and identifying the constituent concentrations;
- Fees associated with an engineering report describing ground-water sampling.

(2) Detection Monitoring, Compliance Monitoring, and Corrective Action Programs

This ICR assumes that the none of the 6 land disposal facilities submitting a Part B permit application will detect the presence of hazardous constituents in ground water prior to submitting a Part B permit application. These 6 facilities must, however, submit the information required to establish a detection monitoring program meeting the requirements of §264.98. EPA estimates that of all permitted land disposal facilities conducting ground-water monitoring activities, 53 percent of these facilities are conducting detection monitoring, ten percent are conducting compliance monitoring, and 37 percent are conducting corrective action. Based on these percentages, EPA estimates that of the 6 land disposal facilities submitting a Part B permit application and the 100 facilities that have lost interim status and are submitting an application for post-closure, 56 facilities will submit information to establish a detection monitoring program; 11 facilities will submit information to establish a compliance monitoring program; and 39 facilities will submit information to establish a corrective action program.

EPA estimates that ten percent of the facilities submitting information to establish a corrective action program (four facilities) will also submit a submittal schedule under §270.14(c)(8)(v). EPA does not anticipate that any facilities will submit information on alternate concentration limits in their Part B permit applications.

Associated O&M costs include:

- Contractor services to a description of wastes previously handled at the facility;
- Contractor services in preparing a characterization of contaminated ground water;
- Contractor services for assistance in developing proposed concentration limits and justifications for alternate concentrations; and
- Contractor services for developing an engineering feasibility plan for corrective action.

EXHIBIT 2 (CONTINUED)
CONTENTS OF THE PART B APPLICATION
ESTIMATED ANNUAL RESPONDENT BURDEN AND COST

INFORMATION COLLECTION ACTIVITY	Hours per Respondent/Activity Legal $93.97/hr	Manager $71.49/hr	Technica $46.79/hr	Clerical $24.48/hr.	Respons Hours/ Year	Labor Cost/ Year	Capital/ Startup Cost	O & M Cost	Number of Res- pondents/ Activity	Total Hours per Year	Total Cost per Year
GROUND-WATER PROTECTION (270.14(c)(1)-(8))											
General Ground-Water Monitoring Requirements (270.14(c) (1)-(5))											
Read the regulations	0.00	0.00	0.50	0.00	0.50	$23.40	$0.00	$0.00	106	53.00	$2,479.87
Summarize interim status ground-water monitoring data	0.00	4.00	30.00	4.00	38.00	$1,787.58	$0.00	$3,000.00	100	3,800.00	$478,758.00
Collect and document hydrogeologic information	0.00	4.00	25.00	4.00	33.00	$1,553.63	$0.00	$4,000.00	100	3,300.00	$555,363.00
Add required information to topographical map	0.00	0.00	2.00	0.00	2.00	$93.58	$0.00	$10.00	100	200.00	$10,358.00
Prepare a description of plume contamination	0.00	1.00	50.00	1.00	52.00	$2,435.47	$0.00	$5,333.33	10	520.00	$77,688.03
Develop ground-water sampling and analysis procedure	0.00	0.00	40.00	0.00	40.00	$1,871.60	$0.00	$5,000.00	6	240.00	$41,229.60
Determine appropriate statistical method	0.00	0.00	3.00	0.50	3.50	$152.61	$0.00	$0.00	6	21.00	$915.66
Submit the required information	0.00	0.00	0.00	0.50	0.50	$12.24	$0.00	$3.00	106	53.00	$1,615.44
File copies of the submitted information at the facility	0.00	0.00	0.00	0.10	0.10	$2.45	$1.00	$0.00	106	10.60	$365.49
Detection Monitoring Program (270.14(c)(6))											
Read the regulations	0.00	0.50	0.50	0.00	1.00	$59.14	$0.00	$0.00	106	106.00	$6,268.84
Compile information to determine monitoring constituents	0.00	0.00	6.00	1.00	7.00	$305.22	$0.00	$0.00	56	392.00	$17,092.32
Prepare the plans and engineering report	0.00	0.50	10.00	1.00	11.50	$528.13	$0.00	$300.00	56	644.00	$46,375.00
Establish background values	0.00	0.00	80.00	0.00	80.00	$3,743.20	$0.00	$13,333.33	56	4,480.00	$956,285.87
Determine a reasonable time period for identifying contamination	0.00	0.00	2.00	0.00	2.00	$93.58	$0.00	$0.00	56	112.00	$5,240.48
Submit the required information	0.00	0.00	0.00	0.50	0.50	$12.24	$0.00	$3.00	56	28.00	$853.44
File copies of the required information at the facility	0.00	0.00	0.00	0.10	0.10	$2.45	$1.00	$0.00	56	5.60	$193.09

EXHIBIT 2 (CONTINUED)
CONTENTS OF THE PART B APPLICATION
ESTIMATED ANNUAL RESPONDENT BURDEN AND COST

INFORMATION COLLECTION ACTIVITY	Hours per Respondent/Activity Legal $93.97/hr	Manager $71.49/hr	Technica $46.79/hr	Clerical $24.48/hr.	Respons Hours/ Year	Labor Cost/ Year	Capital/ Startup Cost	O & M Cost	Number of Res- pondents/ Activity	Total Hours per Year	Total Cost per Year
GROUND-WATER PROTECTION (CONTINUED)											
Compliance Monitoring Program (270.14(c)(7))											
Read the regulations	0.00	0.50	0.50	0.00	1.00	$59.14	$0.00	$0.00	106	106.00	$6,268.84
Provide a description of wastes previously handled at the facility	0.00	0.5	1	0.5	2.00	$94.78	$0.00	$13,000.00	11	22.00	$144,042.53
Provide characterization of contaminated ground water	0.00	20.00	120.00	15.00	155.00	$7,411.80	$0.00	$600.00	11	1,705.00	$88,129.80
Develop list of hazardous constituents for compliance monitoring	0.00	0.50	3.00	0.50	4.00	$188.36	$0.00	$0.00	11	44.00	$2,071.91
Develop proposed concentration limits and justification for alternate concentration limits	0.00	2.00	16.00	2.00	20.00	$940.58	$0.00	$3,333.33	11	220.00	$47,013.05
Prepare description and engineering report describing the proposed ground-water monitoring system	0.00	2.00	16.00	2.00	20.00	$940.58	$0.00	$0.00	11	220.00	$10,346.38
Determine a reasonable time period for identifying increased contamination	0.00	0.00	2.00	0.00	2.00	$93.58	$0.00	$0.00	11	22.00	$1,029.38
Develop an engineering feasibility plan for corrective action	0.00	2.00	80.00	2.00	84.00	$3,935.14	$0.00	$13,333.33	11	924.00	$189,953.21
Submit the required information	0.00	0.00	0.00	0.50	0.50	$12.24	$0.00	$3.00	11	5.50	$167.64
File copies of the submitted information at the facility	0.00	0.00	0.00	0.10	0.10	$2.45	$1.00	$0.00	11	1.10	$37.93
Corrective Action Program (270.14(c)(8))											
Read the regulations	0.00	0.50	0.50	0.00	1.00	$59.14	$0.00	$0.00	106	106.00	$6,268.84
Provide characterization of the contaminated ground water	0.00	1.00	20.00	3.00	24.00	$1,080.73	$0.00	$8,333.33	39	936.00	$367,148.47
Develop concentration limits	0.00	1.00	20.00	0.00	21.00	$1,007.29	$0.00	$0.00	39	819.00	$39,284.31
Prepare detailed plans and engineering report for corrective action	0.00	2.00	8.00	2.00	12.00	$566.26	$0.00	$1,000.00	39	468.00	$61,084.14
Prepare description of how the ground-water monitoring program will demonstrate the adequacy of the corrective action	0.00	0.50	3.50	1.00	5.00	$223.99	$0.00	$0.00	39	195.00	$8,735.61
Prepare a schedule for submittal of information under 270.14(c)(8)(iii) and (iv)	0.00	0.50	1.00	0.25	1.75	$88.66	$0.00	$0.00	11	19.25	$975.21
Prepare demonstration for alternate concentration limits	0.00	2.00	16.00	2.00	20.00	$940.58	$0.00	$0.00	0	0.00	$0.00
Submit the required information	0.00	0.00	0.00	0.50	0.50	$12.24	$0.00	$3.00	39	19.50	$594.36
File copies of the submitted information at the facility	0.00	0.00	0.00	0.10	0.10	$2.45	$1.00	$0.00	39	3.90	$134.47
Total	0.00	varies	varies	varies	varies	varies	varies	varies	varies	19,801.45	$3,174,368.18

Solid Waste Management Units

All facilities applying for a Part B operating or post-closure permit (144 facilities) must submit information on solid waste management units. Based on previous experience, EPA estimates that the majority of these facilities will have already submitted this information while they were operating under interim status or in response to section 3007 letters. Therefore, EPA estimates that 23 percent (33 facilities) will be required to submit this information with their permit applications.

O&M costs would be incurred to conduct sampling and analysis of ground-water, land surface, and subsurface strata, surface water, or air, which may include the installation of wells.

EXHIBIT 2 (CONTINUED)
CONTENTS OF THE PART B APPLICATION
ESTIMATED ANNUAL RESPONDENT BURDEN AND COST

INFORMATION COLLECTION ACTIVITY	Hours per Respondent/Activity Legal $93.97/hr	Manager $71.49/hr	Technica $46.79/hr	Clerical $24.48/hr.	Respons Hours/ Year	Labor Cost/ Year	Capital/ Startup Cost	O & M Cost	Number of Res- pondents/ Activity	Total Hours per Year	Total Cost per Year
SOLID WASTE MANAGEMENT UNITS (270.14(d))											
Read the regulations	0.00	0.10	0.15	0.00	0.25	14.17	$0.00	$0.00	144	36.00	2,040.12
Compile information on solid waste managemer	0.00	0.25	4.00	0.25	4.50	$211.15	$0.00	$0.00	33	148.50	$6,968.03
Compile information on releases from the unit(s	0.00	0.25	4.00	0.25	4.50	$211.15	$0.00	$0.00	33	148.50	$6,968.03
Prepare results of sampling and analysis where the the Director ascertains that a RCRA Facility Assessment is necessary	0.00	1.00	32.00	3.00	36.00	$1,642.21	$5,000.00	$3,333.33	33	1,188.00	$329,192.93
Submit the required information	0.00	0.00	0.00	0.50	0.50	$12.24	$0.00	$3.00	33	16.50	$502.92
File copies of the submitted information at the f	0.00	0.00	0.00	0.10	0.10	$2.45	$1.00	$0.00	33	3.30	$113.78
Total	0.00	1.60	40.15	4.10	45.85	$2,093.37	$5,001.00	$3,336.33	33	1,540.80	$345,785.82